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10/537,294	06/02/2005	Samuel Ozil	0581-1012	8090

466 7590 01/11/2008  
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EXAMINER
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MILLER, SAMANTHA A

ART UNIT	PAPER NUMBER
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3749

MAIL DATE	DELIVERY MODE
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01/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/537,294

Applicant(s)

OZIL, SAMUEL

Examiner

Samantha A. Miller

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

Receipt of applicant's amendment filed on 9/19/2007 is acknowledged.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoague (6,186,140) in view of Jensen (4,821,709).

Hoague teaches in the specification and Figs. 1-6 an invention in the same field of endeavor as applicant's invention that is described in the applicant's claims.

#### A. Hoague teaches:

1. A first leak tight case (134) having at least one inlet opening (at 126) suitable for sucking in said fluid, and an outlet opening (112) (col.3 ll.45-50), and also a first electrical connection passage (122); a filter cartridge (124); means (col.3 ll.50-56) for mounting the filter cartridge in association with the inlet opening of the first case (col.3 ll.50-56); an impeller (118) having at least one inlet port for sucking in said fluid contained in said first case, and an outlet orifice

for delivering said sucked-in fluid (col.3 ll.45-50), said impeller having a drive motor (118) controllable via a power supply input (120) (col.3 ll.7-9); means (Fig.2) for mounting said impeller in the inside of the first case; a duct (thru 130) for connecting the outlet orifice (112) of the impeller to the outside of the first case (134), said duct passing in leak tight manner through the outlet opening (112) of the first case (Fig.1) (col.3 ll.45-55); a second case (130); a second electrical connection passage (116) made through the wall of said second case (col.3 l.25-27); a source (404) suitable for delivering electrical energy to an output terminal (OUT1), said source being disposed in the inside of the second case (130) (col.5. ll.5-9 and 35-36); an electronic control circuit (410); means for associating the first and second cases in such a manner that the first and second electrical connection passages form a single leak proof third electrical connection passage (Fig.1) (col.3 ll.60-63); a second electrical connector for connecting a first control output of the electronic control circuit (410) to the control input of the motor (118) for driving the impeller (col.3 ll.29-31); and a third electrical connector (35) for connecting the electrical energy source to a power supply input of the electronic control circuit (410); said electronic control circuit further including an output suitable for delivering a first alarm signal (202) when the level of electrical energy delivered by said source drops below a determined threshold value (col.6 ll.35-37 and 50-58). A converter controllable from a control input, said converter being suitable for transforming an electrical signal into a sound signal (202) (col.6 ll.58-63); and a fifth electrical connector for connecting the

control terminal of the converter to that output of the electronic control circuit that is suitable for delivering said first alarm signal (col.6 ll.58-63). The converter is situated in said duct (130) (Fig.2).

2. The electronic control circuit (410) is located inside the second case (130) (Fig.2 and 4) (col.4 ll.14-6).

3. A switch (col.5 l.2) mounted in leak tight manner through the wall of the first case (134) so that its control element is accessible from the outside of the first case (on 134) (col.5 ll.1-3) and its electrical control terminals (via 404 and 406) are situated in the inside of the first case (134) (col.5 ll.1-4); and a fourth electrical connector for connecting the electrical control terminals of said switch to a control input of the electronic control circuit (410) (col.5 ll.1-10).

4. An electrical connection pin (or any mount) mounted in leak tight manner through the wall of the second case (130) (col.4 ll.15-16 and ll.25-30), the output terminals thereof being situated in the inside of said second case (130) (Fig.4) and being connected respectively to an energy feed input of said energy source (120) and to a control input (404 406) of the electronic control circuit (410) (col.4 l.64-col.5 l.10).

7. The converter is constituted by at least one of the following elements: a buzzer, a loudspeaker (col.6 ll.58-63).

8. The filter cartridge (124) is constituted: by a filter pellet (128) for filtering first particles of a given size, said pellet covering said inlet opening (at 126) of the

first case (134) in full (Fig.5); and a cap (126) covering said pellet in such a manner that the pellet is situated between the cap and the inlet opening of the first case (134) (Fig.1), said cap including filter orifices/vents for filtering second particles of a size greater than the size of the first particles (col.3 ll.49-50).

9. The means (108) for making a fluid connection between the end (112) of said duct (130) situated outside said first case (134) with an inlet for feeding the inside of said garment (102) with fluid.

11. The means for applying said second alarm signal to the control terminal (410) of said converter (col.6 ll.58-63).

13. A switch (col.5 ll.2-3) mounted in leak tight manner through the wall of the first case (134) so that its control element (410) is accessible from the outside of the first case and its electrical control terminals (404, 406) are situated in the inside (114) of the first case (134) (col.6 ll.1-10); and a fourth electrical connector for connecting the electrical control terminals of said switch to a control input of the electronic control circuit (col.5 ll.1-7).

14. An electrical connection pin (any mount) mounted in leak tight manner through the wall of the second case (130) (col.4 ll.15-16 and ll.25-30), the output terminals thereof being situated in the inside (114) of said second case and being connected respectively to an energy feed input of said energy source (120) and to a control input (404, 406) of the electronic control circuit (410) (col.4 ll.63-67).

15. An electrical connection pin (any mount) mounted in leak tight manner through the wall of the second case (130) (col.4 ll.15-16 and ll.25-30), the output

terminals thereof being situated in the inside (114) of said second case (130) and being connected respectively to an energy feed input of said energy source (120) and to a control input (404, 406) of the electronic control circuit (410) (col.4 ll.63-67).

16. The converter is constituted by at least one of the following elements:  
a buzzer, a loudspeaker (col.6 ll.58-63).

B. Hoague teaches the invention as discussed above including a comparator, which determines if the filter system is operational. However, Hoague does not teach a flow meter.

C. Jensen teaches:

1. A flow meter (213) disposed inside the duct, said flow meter having an outlet suitable for delivering an electrical signal representative of the flow rate of fluid passing along the duct (col.17 ll.17-25); a first electrical connector for connecting the output of the flow meter to a first input of the electronic control circuit (287) (Fig.10) (col.24 ll.26-35);

10. A flow regulator circuit suitable for delivering a first and second alarm signal (278, 282) when the fluid flow rate in the duct varies by a determined quantity about a given nominal flow rate value (Fig.10).

12. The flow rate regulator circuit is disposed in said first case (200) (col.16 ll.67-68) (Fig.7).

17. A flow regulator circuit suitable for delivering a first and second alarm signal (278, 282) when the fluid flow rate in the duct varies by a determined quantity about a given nominal flow rate value (Fig.10).

18. The flow rate regulator circuit is disposed in said first case (200) (col.16 ll.67-68) (Fig.7).

D. Therefore, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the ventilator of Hoague in view of the teaching of Jensen in order to provide a ventilator which will produce sufficient gas exchange to sustain full ventilation of a person without overpressurizing the persons lungs (col.3 ll.10-13).

### ***Response to Arguments***

1. Applicant's arguments filed 9/19/2007 have been fully considered but they are not persuasive.

2. Applicant contends that HOAGUE does not teach the converter being situated in the duct since it is not in the duct for the air stream. However, claims are afforded their broadest reasonable interpretation.

In this instant application, claim 1 merely requires the converter is situated in said duct. There are three responses to this argument, first, the definition of a duct from [www.dictionary.com](http://www.dictionary.com) 1/7/2008 is 1. any tube, canal, pipe, or conduit by which a fluid, air,



or other substance is conducted or 2. conveyed or a single enclosed runway for conductors or cables. As shown by the second definition of a duct airflow does not have to be present and that the converter is in duct 134. The second response to this argument is that the alarm (202) is connect to sense the air unit/filter assembly and though not shown in the drawing must have access to the airflow and be in the airflow duct (134), as explained in the Abstract of HOAGUE. The third response is, even if HOAGUE did not teach the sensor for the alarm (202) being in the airflow duct (134) the combination of HOAGUE in view of the flow meter of JENSEN certainly would teach the flow meter to being in the airflow of the airflow duct (134).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272-9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

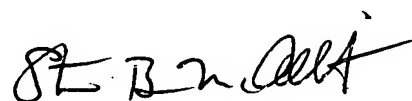
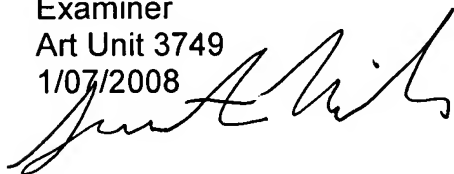
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller  
Examiner  
Art Unit 3749  
1/07/2008



STEVEN B. MCALLISTER  
SUPERVISORY PATENT EXAMINER